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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/749,826	12/28/2000	John Alson Hicks III	BS00-343	5202
38516	7590	12/16/2005	EXAMINER	
SCOTT P. ZIMMERMAN, PLLC PO BOX 3822 CARY, NC 27519			LAMBRECHT, CHRISTOPHER M	
			ART UNIT	PAPER NUMBER

2611

DATE MAILED: 12/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/749,826

Applicant(s)

HICKS ET AL.

Examiner

Christopher M. Lambrecht

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21, 24-34 and 36-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21, 24-34 and 36-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/10/05, 10/14/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to the pending claims have been considered but are moot in view of the new ground(s) of rejection.

Applicant's failure to adequately traverse facts Officially noticed in the previous Office action constitutes an admission of the facts noticed.

Claim Objections

2. Claim 34 objected to because of the following informalities: Delete "32" from line 1 of claim 34. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 43-47, 49, 50, and 52 are rejected under 35 U.S.C. 102(e) as being anticipated by Russo (of record).

Regarding claim 43, Russo discloses an apparatus for selecting multimedia on demand, comprising:

a data switch interface (tuner 104, fig. 2) coupled to a switch port of a data switch (108, fig. 2), the data interface selecting and receiving digital information (col. 7,

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ll. 41-46) from a plurality of multimedia sources (*i.e.*, cable channels col. 7, ll. 1-3, 102, fig. 2);

a processor (150, fig. 2) for controlling selection of information via the data switch interface (col. 9, ll. 35-48);

processing logic (112, fig. 2) for processing the received digital information for output (col. 8, ll. 7-21).

As to claim 44, Russo discloses an apparatus according to claim 43, wherein the processing logic comprises decoder logic that converts digital information (col. 8, ll. 7-21).

As to claims 45 and 49, Russo discloses an apparatus according to claim 43, further comprising a radio frequency receiver (142, fig. 2) that receives radio signals (col. 9, ll. 26-34).

As to claim 46, Russo discloses an apparatus according to claim 45, wherein the received radio signals control selection of the digital information (col. 9, ll. 2-22).

As to claim 47, Russo discloses an apparatus according to claim 43, wherein the processing logic comprises decryption logic (114, fig. 2) coupled to the data switch that decrypts the digital information received from the data switch (col. 10, ll. 25-32).

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As to claim 50, Russo discloses an apparatus according to claim 43, wherein the data switch interface (104) is coupled to the switch port via a dedicated communication link (106).

As to claim 52, Russo discloses an apparatus according to claim 43, further comprising a television display (8, fig. 1) for displaying the output from the processing logic (col. 3, ll. 60-64).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3, 5, 8, 9, 12-19, 23-33, and 36 rejected under 35 U.S.C. 103(a) as being unpatentable over Russo in view of U.S. Patent No. 5,790,176 to Craig (hereinafter "Craig").

Regarding claim 1, Russo discloses a system for multimedia on demand (col. 3, ll. 9-30), the system comprising:

a mass storage device (See Figure 2, 110) adapted to receive and store a multimedia content item (col. 7, ll. 47 – col. 8, l. 41);

a processor (150 and col. 9, ll. 35-39) coupled to the mass storage device; and

a memory (158) coupled to the processor, the memory storing a multimedia-on-demand data table and multimedia-on-demand instructions (col. 10, ll. 14-20), the multimedia-on-demand table including

a multimedia content identifier field with a multimedia content identifier to correspond to a multimedia content item stored on the mass storage device (col. 9, ll. 62-67), and

a multimedia content usage indicator field (col. 10, ll. 33-39) that stores a multimedia content usage indicator associated with the multimedia content item stored on the storage device (*i.e.*, which programs stored on the storage device have been viewed),

the multimedia-on-demand instructions to be executed by the processor, the multimedia-on-demand instructions including instructions to automatically receive the multimedia content item, and

send a multimedia-on-demand usage message, the multimedia-on-demand usage message based at least in part on the multimedia content usage indicator (col. 10, ll. 32-53).

Russo fails to disclose receiving the multimedia content item at a transmission rate that is less than a real time transmission rate in bytes per second.

In an analogous art, Craig discloses receiving a multimedia content item at a transmission rate that is less than a real time transmission rate in bytes per second (*i.e.*, slower than real-time, col. 11, l. 60 - col. 12, l. 5), thus providing multiple service levels and charging subscribers accordingly.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Russo to include receiving the multimedia content item at a transmission rate that is less than a real time transmission rate in bytes per second as taught by Craig, for the benefit of providing flexible service arrangements that match the needs of the subscribers.

As to claims 2 and 3, the claimed subject matter is met by Russo and Craig as applied in the rejection of claim 1, above.

As to claim 5, Russo and Craig together disclose the system of claim 1. In addition, Russo discloses the content usage indicator being adapted to indicate whether a content item was at least in part sent to an information appliance for playback (col. 5, ll. 24-31).

As to claims 8 and 9, Russo and Craig together disclose the system of claim 1. In addition, Russo discloses the usage message includes the multimedia content identifier and the multimedia content usage indicator (col. 10, ll. 33-53).

As to claim 12, Russo and Craig together disclose the system of claim 1. In addition, Russo discloses a data switch (tuner 104, fig. 2) coupled to the mass storage device (110).

As to claim 13, Russo and Craig together disclose the system of claim 12. Russo further discloses a plurality of broadband communication links (*i.e.*, cable channels col. 7, ll. 1-3, 102, fig. 2) coupled to the data switch (104).

As to claim 14, Russo and Craig together disclose the system of claim 13. Russo further discloses a plurality of information appliances (VCR 6 and TV 8, fig. 1), each coupled to a broadband communication link (via tuner 104, fig. 2).

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As to claim 15, Russo and Craig together disclose the system of claim 1. In addition, Russo discloses the multimedia content item may be a movie (col. 5, ll. 3-7).

As to claim 16, Russo and Craig together disclose the system of claim 1. In addition, Russo discloses an input/output port coupled to the mass storage device (See Figure 2, 120) to communicate with a multimedia recording device (col. 8, ll. 42-65).

Regarding claims 17 and 18, see Russo and Craig as applied to claim 1, above. Russo further discloses that the system is adapted to receive and store a plurality of content items and corresponding table entries (col. 5, ll. 3-8 and col. 9, ll. 62-67).

As to claim 19, Russo and Craig together disclose the system of claim 17. In addition, Russo discloses the content usage indicator consists of a content played indicator (col. 9, ll. 62-67).

As to claims 23 and 24, Russo and Craig together disclose the system of claim 17, wherein a portion of the multimedia content item being less than the entirety of the multimedia content item is received at a transmission rate that is less than the playback rate in bytes per second (*i.e.*, where the entirety of the content is received at a rate less than the playback rate [see cited portions of Craig], a portion thereof is inherently also received at a rate that is less than the playback rate). What is not disclosed, however, is making a determination, based at least in part on the transmission rate and playback rate, that continuous playback of the entirety of the item can begin prior to the receipt of the entirety of the item.

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Official Notice is taken of the fact that it is well known in the art that a media file may be played back prior to completion of the transfer provided the data will be received before playback reaches a point where the data is incomplete when the transfer is slower than the real-time playback data rate.

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Russo and Craig with the incomplete file playback of the well-known prior art in order to allow a user to begin watching media content without having to wait for long periods of time for the entire transfer to be complete.

As to claim 25, Russo and Craig together disclose a system as stated above in claim 17. In addition, Russo discloses the instructions include instructions to receive the plurality of content items from a service provider as stated above, the service provider consisting of cable television, satellite and over-air broadcasting (col. 8, ll. 22-26).

Regarding claim 26, see Russo and Craig as applied to claim 1, above.

As to claim 27, Russo and Craig together disclose the system of claim 26. In addition, Russo discloses:

receiving a multimedia content item usage instruction (play command) related to the first content item (col. 11, ll. 2-6);

directing usage of the first multimedia content item based at least in part on the item usage instruction (play command) (col. 8, ll. 42-52); and

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updating the data table based at least in part on the content item usage instruction (col. 9, ll. 62-67).

As to claim 28, Russo and Craig together disclose the system of claim 27. In addition, Russo discloses that the usage instruction is an instruction to playback the multimedia content item as part of a viewing transaction (col. 6, ll. 45-65).

As to claims 29-30, see Russo and Craig as applied to claim 1, above.

As to claim 31, see Russo and Craig as applied to claim 19, above.

As to claims 32 and 33, Russo and Craig together disclose the method of claim 26. Russo further discloses receiving a plurality of multimedia content items (see rejection of claim 17, above), and modifying the data table accordingly (col. 9, ll. 62-67). What is not disclosed, however, is that the second multimedia content item replaces the first, including deleting the first item and deleting its identifier.

Official Notice is hereby taken that it is well known in the art to replace a first stored item with a second by deleting it. Further, it is obvious that upon deleting an item, its record would be removed from the list of programming available to the user on the storage medium since the item is no longer available.

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Russo and Craig with the replacement of content of the well-known prior art in order to allow a newer version of

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content to be received or to enable the receiving of new content by deleting older content in order to free up available storage space.

Regarding claim 36, see the rejection of claim 24, above.

7. Claims 4, 20, 34, and 37-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russo and Craig as applied to claims 1, 17, and 26 above, and further in view of U.S. Patent Application Publication No. 2002/0118954 by Barton et al. (hereinafter "Barton").

Regarding claims 4, 20, and 34, Russo and Craig together disclose the system as stated above in claims 1, 17, and 26, but are silent regarding a storage position identifier, as claimed.

In an analogous art, Barton discloses a storage position identifier (aggregate attributes, *e.g.*, viewer-based program ranking, ¶¶0210-17) for each multimedia item, the storage position identifier specifying a logical storage position for the multimedia content item (¶0123), the storage position identifier received from a service provider and updated by the service provider with each change in the multimedia-on-demand data table (¶¶0219-20), thus enabling service providers more compelling ways to promote viewing of television programming.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Russo and Craig to include the storage position identifier as taught by Barton, for the benefit of providing a more engaging television viewing experience.

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As to claim 37, see the rejection of claim 20, above.

Regarding claims 38 and 39, see the rejection of claim 20. Russo further discloses automatically sending the plurality of content items based at least in part on a subscriber profile (col. 10, ll. 9-12 and 14-20).

As to claim 40, see Russo and Craig as applied in the rejection of claim 32 and Barton as applied in the rejection of claim 20, above.

Regarding claims 41 and 42, see Russo, Craig, and Barton as applied in the rejections of claims 38-40, above.

8. Claims 6-7 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russo and Craig as applied to claim 1 above, and further in view of Knudson (of record).

Regarding claims 6 and 7, Russo and Craig together disclose the system of claim 1. Russo further discloses that content may be recorded onto a removable videotape (col. 8, ll. 53-58), but fails to disclose that the usage indicator is adapted to indicate whether the content item was read from the mass storage device and sent to an information appliance for non-volatile recording.

In an analogous art, Knudson discloses a system for recording television programming (col. 6, ll. 51-53) including pay programming (col. 9, ll. 25-26) and copy protected programming (col. 9, ll. 63-66). The system of Knudson differentiates between the playing back and the recording of such programming and subsequently charges the

user a different amount based on the determination (col. 10, ll. 10-33). An order message is transmitted and processed by the television distribution facility. This message reads on the claimed usage indicator, based in part on whether the content item was sent to an information appliance (VCR) for non-volatile recording of the item. In combination with Russo, Knudson discloses reading the content item from the mass storage device for recording to the removable videotape at an additional cost. Knudson is evidence that one of ordinary skill in the art would appreciate the ability to monitor the type of content usage and charge according to the nature of the usage (playback or recording of content).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Russo and Craig with the levels of usage of Knudson in order to charge different levels of fees for the rights to view or record a program in order to cover appropriate royalties associated therewith.

Regarding claims 10 and 11, Russo and Craig together disclose the system of claim 1. What is not disclosed, however, is that the usage message includes playback or purchase cost data associated with the usage data.

Knudson disclose a system for recording television programming (col. 6, ll. 51-53) including pay programming (col. 9, ll. 25-26) and copy protected programming (col. 9, ll. 63-66). The system of Knudson differentiates between the playing back and the recording (purchasing) of such programming and subsequently charges the user a different amount based on the determination (col. 10, ll. 10-33). An order message is transmitted and processed by the television distribution facility (col. 10, ll. 20-23). In this system, the user is billed based on the level of service they select. Therefore, it is inherent that data associated with that cost or level of service must be transmitted to the

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service provider for such billing. This reads on the claimed usage message including playback and purchase cost data associated with the usage indicator. Knudson is evidence that one of ordinary skill in the art would appreciate the ability to transmit cost data to the service provider for billing based on different levels of service.

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Russo and Craig with the usage message including cost data of Knudson in order to charge different levels of fees for the rights to view (playback) or record (purchase) a program in order to cover appropriate royalties associated therewith.

9. Claims 48 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russo.

Regarding claims 48 and 53, Russo discloses a system as stated above in claim 43. Russo further discloses that the switch receives and routes digital compressed information. Russo, however, does not disclose that the data switch interface comprise an Ethernet interface that provides an interface to an Ethernet data switch.

Official Notice is taken of the fact that it is well known in the art to use Ethernet to transfer digital information between devices.

Accordingly it would have been obvious to one having ordinary skill in the art at the time of invention to use an Ethernet interface and switch to transport data between the tuner(s) (104) and the routing switch (108) in order to make use of an existing network infrastructure or use a well known and widely accepted data transport standard. This Ethernet connection further reads on the claimed interface port coupled to the switch via a shared communication link.

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Conclusion

10. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

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Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Lambrecht whose telephone number is (571) 272-7297. The examiner can normally be reached on 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher M Lambrecht
Examiner
Art Unit 2611

cml

A handwritten signature in black ink, appearing to read 'Hai Tran', is written over three horizontal lines.

**HAI TRAN
PRIMARY EXAMINER**